

Construction Project Briefing

November 13, 2013



Today's Presentation

- Traction Power - Farwell/Armitage/Hill Substations
- Red Line South Reconstruction Project (Track & Station)
- Bus Hoist Replacement Program
 - ✓ Phase 1 – Forest Glen, South Shops, 77th Street Bus Garage
 - ✓ Phase 2 – Kedzie Bus Garage
 - ✓ Phase 3 – North Park Garage
 - ✓ Phase 4 – Chicago and 103rd Garage



Project Title: Traction Power Systems Upgrades and Improvements

Managing Department: Power & Way Construction

Justification of Need:	Substation equipment is obsolete and has exceeded its current lifespan
Priority of Project:	High
Total Project Budget:	\$56,918,563.00
Construction Contract Value:	\$46,684,000.00
Earned to Date:	4%
Percent Change Orders to Construction Contract:	0%
Percent Time Used to Date:	34.69%
Funding Source:	State Capital Program
Estimated Start Date/Estimated Length of Project:	NTP issued September 30, 2012
Designer of Record:	Laramore, Douglass and Popham(LDP)
Construction Manager/General Contractor:	STV (CM), F.H. Paschen (GC)
Project Manager:	Barney Gray (GM); David Heard (PM)

Detailed Overview of Scope:
Construct Three (3) New Traction Power Substations namely, Farwell, Armitage, Hill Modify Orleans Switch Room Modify Weed Switch Room Modify Sedgwick Substation



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Impact on Customers:	9 Single Tracks, and 6 Reroutes. Street and lane closures around worksites, curtailed access to resident garages (at Armitage).
Benefit to System:	Additional traction power capacity reduced traction power related train defects, improved reliability for revenue service, and improved safety.
Benefit to Community:	Improved safety.
Impact on Accessibility:	None.
Estimated # of Jobs Created:	89
Customer Communication Need:	Construction Activity Notices will be needed to alert businesses and residents to weekend, night work and power outages.

Comparable Projects:
<ul style="list-style-type: none">• NA



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Construction Progress

Phase	Description	Status
Construction	<ul style="list-style-type: none">▪ Farwell – 1st Floor Concrete Walls have been completed. Installation of rebar and formwork is continuing for the 2nd Floor Slab with the concrete pour scheduled for mid-month. Rebar and Formwork for the 2nd Floor Walls is underway with associated concrete pours scheduled for the end of the month. Site Utility work and Building Masonry will follow.▪ Armitage – Installation of track level platforms and cable supports continues. Site work has begun to regrade and excavate 18 inches in preparation for Earth Retention System (ERS) installation. CTA Track Structure Column Replacement work will continue into next year.▪ Hill – Foundation walls and columns have been completed. 1st Floor Slab Rebar and Formwork installation are continuing for the concrete pour over the Cable Vault Area. The Exterior Foundation Walls are being waterproofed and the Transformer Area is currently being backfilled to prepare for the 1st Floor Transformer Area rebar installation and concrete pour.<ul style="list-style-type: none">▪ Sedgwick- Cable Support Brackets and Switch Platforms have been installed ahead of schedule.	Ongoing

Delay Explanation:

- CDOT OUC reviewing earth retention permit requirements for Armitage. FHP has received OUC permit.



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Farwell substation interior with east wall framed

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Farwell substation 2nd floor rebar installation

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Hill Substation foundation wall concrete pour

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Hill Substation 1st floor formwork and rebar installation

Project Title: Traction Power Systems Upgrades and Improvements

Managing Department: Power & Way Construction



Armitage Substation excavation and column replacement preparation

Project Title: Red Line South Reconstruction Project

Managing Department: Power & Way Construction

Justification of Need:	The existing ties, rail and track components, as well the underlying ballast and drainage systems have reached or exceeded their useful life. In addition, this project is necessary to provide accessibility at all of the Dan Ryan stations and to improve customer experience at these stations.	
Priority of Project:	High	
Total Project Budget:	\$425M	
Funding Source:	RTA/IDOT CTA-2012-LI; City of Chicago TIF	
Designer of Record:	T.Y. Lin International; TranSystems Corporation	
Construction Manager:	Parsons Brinckerhoff	
Project Manager:	Robert Wittmann (GM); Brittany Dyra (PM)	
	Track Renewal	Station Improvements
Construction Contract Value:	\$220,166,000	\$43,875,000
Earned to Date:	\$178.1M (as of September 15th)	\$36.6M (as of September 20th)
Percent Change Orders to Construction Contract:	(-2.1%)	0.0%
Percent Time Used to Date:	52.2% (as of October)	100.0%
Estimated Start Date/Estimated Length of Project:	Notice To Proceed: October 4, 2012 Substantial Completion: October 24, 2014	Notice To Proceed: December 21, 2012 Substantial Completion: October 6, 2013
General Contractor:	Kiewit Infrastructure Co.	F.H. Paschen, S. N. Nielsen & Associates, LLG



Project Title: Red Line South Reconstruction Project

Managing Department: Power & Way Construction

Impact on Customers:	The Dan Ryan Red Line branch from Cermak to 95 th will be shutdown for 154 days from May 19 th , 2013 to October 20, 2013. There may be single track outages prior to the line cut to perform preparatory work.
Benefit to System:	Reduced maintenance costs; Improved reliability; New infrastructure
Benefit to Community:	Improved customer travel times by eliminating slow zones; New elevators at Garfield, 63 rd and 87 th
Impact on Accessibility:	Garfield, 63 rd and 87 th stations will be accessible.
Estimated # of Jobs Created:	1150
Customer Communication Need:	Preliminary outreach started last fall. A comprehensive outreach plan will be implemented to ensure all customers clearly understand travel alternatives and construction impacts.

Detailed Overview of Scope:	
<ul style="list-style-type: none"> • The limits of the project are the South subway portal near 16th/Clark on the north to approximately 95th Street on the south and including portions of the 18th Connector. • Replacement of deteriorated track components, including new running rail, ties, fasteners, ballast, and drainage improvements. Structural work includes expansion joint replacement, new waterproofing, concrete repairs. Systems work includes contact rail replacement, new supplemental negative return, temporary relocation and/or replacement of existing signal and communications infrastructure. • Rehabilitation of various architectural, civil, structural, mechanical and electrical elements at eight (8) stations along the Dan Ryan Red Line branch: Cermak/Chinatown, Sox/35th, 47th, Garfield, 63rd, 69th, 79th, and 87th. This work includes interior and exterior painting, platform canopy repairs, lighting and window repairs, and station cleaning. • Construction of new elevators at Garfield, 63rd and 87th stations. • New railing at the 69th St. bus bridge. 	



Project Title: Red Line South Reconstruction Project

Managing Department: Power & Way Construction

Construction Progress

Phase	Description	Status
Construction	Substantial completion for the track work was achieved on October 20th, 2013. Substantial completion for the station work was achieved on October 6th, 2013.	Ongoing

Delay Explanation:
<ul style="list-style-type: none"><li data-bbox="73 1182 193 1206">• N/A



Project Title: Red Line South Reconstruction Project

Managing Department: Power & Way Construction



87th Station



Project Title: Red Line South Reconstruction Project

Managing Department: Power & Way Construction



Cermak-Chinatown Station

Project Title: Red Line South Reconstruction Project

Managing Department: Power & Way Construction



New Trackwork

Project Title: Bus Hoist Replacement Program

Managing Department: Facilities Construction

Justification of Need:	The existing bus hoists are beyond their useful life and many are not functioning.:			
Priority of Project:	High			
Construction Phase	Phase 1: 77 th /SS/ Forest Glen	Phase 2: Kedzie	Phase 3: North Park	Phase 4: Chicago/103 rd
Bus Hoist Equipment Contract Value:	\$1,668,052	\$1,163,892	\$779,769	\$1,066,901
Construction Contract Value:	\$2,663,345	\$3,135,143	\$1,869,630	\$2,820,651
Value Earned to Date (Construction and Hoists):	\$4,133,816	\$2,653,521	\$1,197,510	\$0
Percent Change Orders to Construction Contract:	25%	0%	0%	0%
Percent Time Used to Date:	95%	80%	50%	0%
Estimated Start and Completion Date:	NTP 11/21/12 Projected completion 10/18/13.	NTP 3/4/13 Projected completion 12/20/13.	NTP 6/24/13 Projected completion 3/05/14.	NTP 9/10/13 Projected completion 7/09/14.
Designer of Record:	TranSystems Corporation			
Contractor	Paul Borg	Kiewit	F.H. Paschen	F.H. Paschen
Project Manager:	Steve Mascheri (GM); Shawn Riley (PM); Jacobs (CM)			
Funding Source:	FTA and RTA Grants			

Detailed Overview of Scope:

Replacement of bus maintenance lifts including drainage, electrical work, and maintenance pads.
Project has been sequenced to mitigate interference to CTA Bus Operations.



Project Title: Bus Hoist Replacement Program – Phase 1

Managing Department: Facilities Construction

Impact on Customers:	N/A
Benefit to System:	Improved capacity for maintenance facilities and reliable equipment for bus operations.
Benefit to Community:	N/A
Impact on Accessibility:	N/A
Estimated # of Jobs Created:	80 (phases 1 thru 4)
Customer Communication Need:	N/A

Comparable Projects:
<ul style="list-style-type: none">N/A



Project Title: Bus Hoist Replacement Program – Phase 1

Managing Department: Facilities Construction

Construction Progress

Phase	Description	Status
Phase 1:	<ul style="list-style-type: none"> Project has been sequenced to minimize impact to Bus Operations and Maintenance. <p>Forest Glen – 7 lifts installed. Close out in progress. Underground piping repairs are complete.</p> <p>South Shops – 4 lifts installed and operational. Close out in progress. Repairs on 4 additional pits underway.</p>	Construction
Phase 2:	77 th Garage – 7 lifts installed. Work at 4 of the 11 remaining pits in progress.	Construction
Phase 3:	<ul style="list-style-type: none"> Kedzie Garage – 12 lifts total: 8 lifts installed, working on the last 4 lifts. Work on the wash pit and inspection pit are in progress. 	Construction
Phase 4:	<ul style="list-style-type: none"> North Park Garage – 13 lifts total: 5 lifts installed, work ongoing at 4 more lifts. 103rd and Chicago Garages – NTP issued 9/10/13. Contractor mobilizing 	Construction

Delay Explanation:

Phase 1: Elevation differential in underground drainage has resulted in the requirement to place new drainage lines as opposed to tying into existing drainage lines

Phase 2: Phase 2 date extended to better accommodate installation of hoists and minimize impact to bus operations.

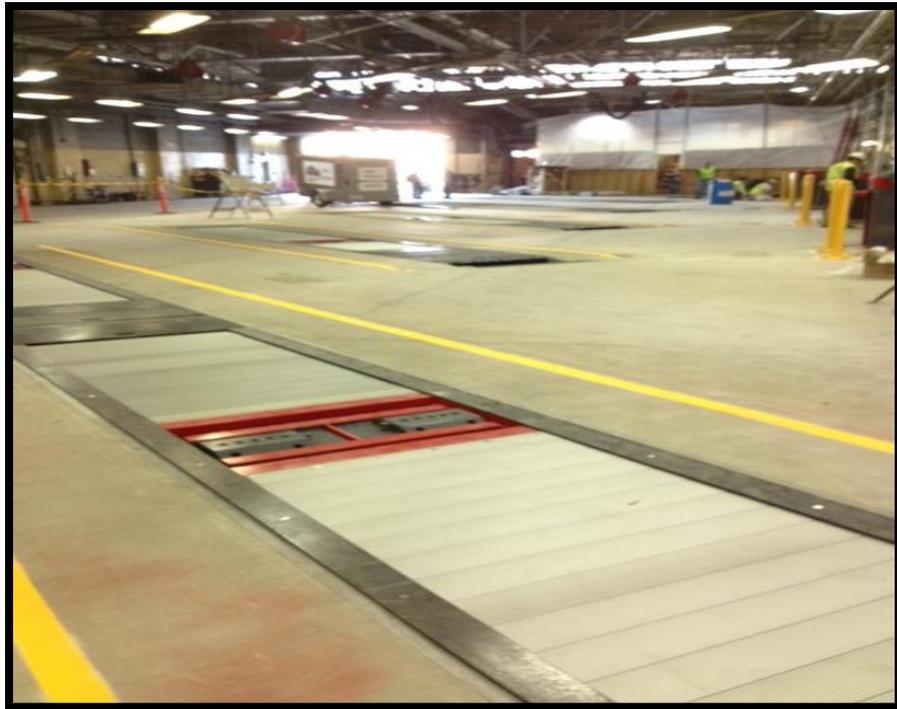
Phase 3: Phase 3 dates extended to better accommodate installation of hoists and minimize impact to bus operations.

Phase 4: Phase 4 dates extended to better accommodate installation of hoists and minimize impact to bus operations.



Project Title: Bus Hoist Replacement Program

Managing Department: Facilities Construction

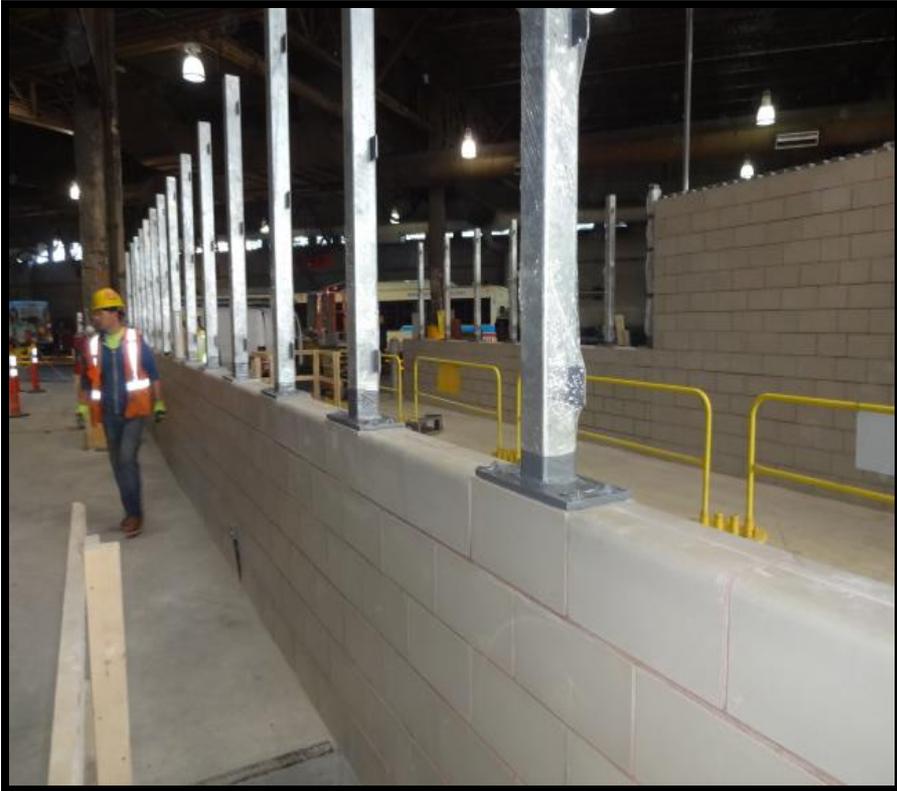


North Park – Bays 1 – 5



North Park – Bays 6 – 9 Demolition

Project Title: Bus Hoist Replacement Program
Managing Department: Facilities Construction



Kedzie – Wash/Inspection Bay Masonry



Kedzie – Bays 1 - 4 Demolition